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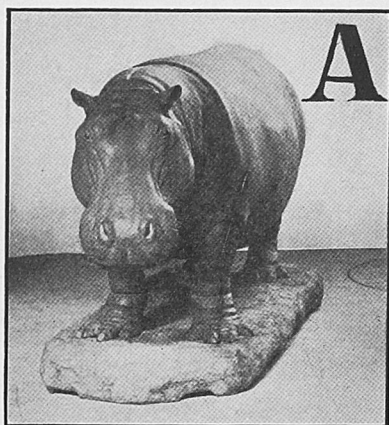
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TAXIDERMY AS AN ART

BY DR. R. W. SHUFELDT



A NUMBER of years ago I paid considerable attention to the various methods then in vogue, in different parts of the world, among those engaged in the preservation of animals of all kinds for museum exhibition or for

private collections; my activity in scientific work has kept me in touch, not only with many of our most distinguished taxidermists, but with large museums all over this country. When but a boy—more than fifty years ago—I prepared over three hundred birds and mammals of my own collecting and some of these early skins are still to be found in the enormous collections of the United States National Museum. In 1893 I was the taxidermical expert sent by the Smithsonian Institution to the World's Fair at Chicago, my duty being to pass,

as judge, upon all the taxidermical exhibits sent in by all the nations of the world and by this country.

Note the beginnings of taxidermy far, far back in human history. The embalming process of the early Egyptians was really a species of taxidermy. Through their crude methods, bodies of men and women as well as of cats, dogs and other animals were preserved through the ages. Five centuries before Christ, Hanno the Carthaginian stated that he had discovered a great ape in western Africa, the "gorilla." Having killed and flayed several of them, he conveyed their skins to his native city. Many centuries later, about 146 B. C. Pliny described these as the *Gorgones*, which speaks volumes for the particular preservatives employed by the ancient explorers under Hanno.

More than thirty years ago among the Zuñi Indians, I noted that they prepared very serviceable "flat skins" of small birds; this they doubtless learned to do in the early days of the race, taught through their contact with native Mexicans—the latter probably having practiced such crude methods of taxidermy for ages. Upon the return of Cortez to Europe he described how Montezuma wore a robe which was covered with the preserved, flat skins of the Trogon or *quetzal*, one of Mexico's most

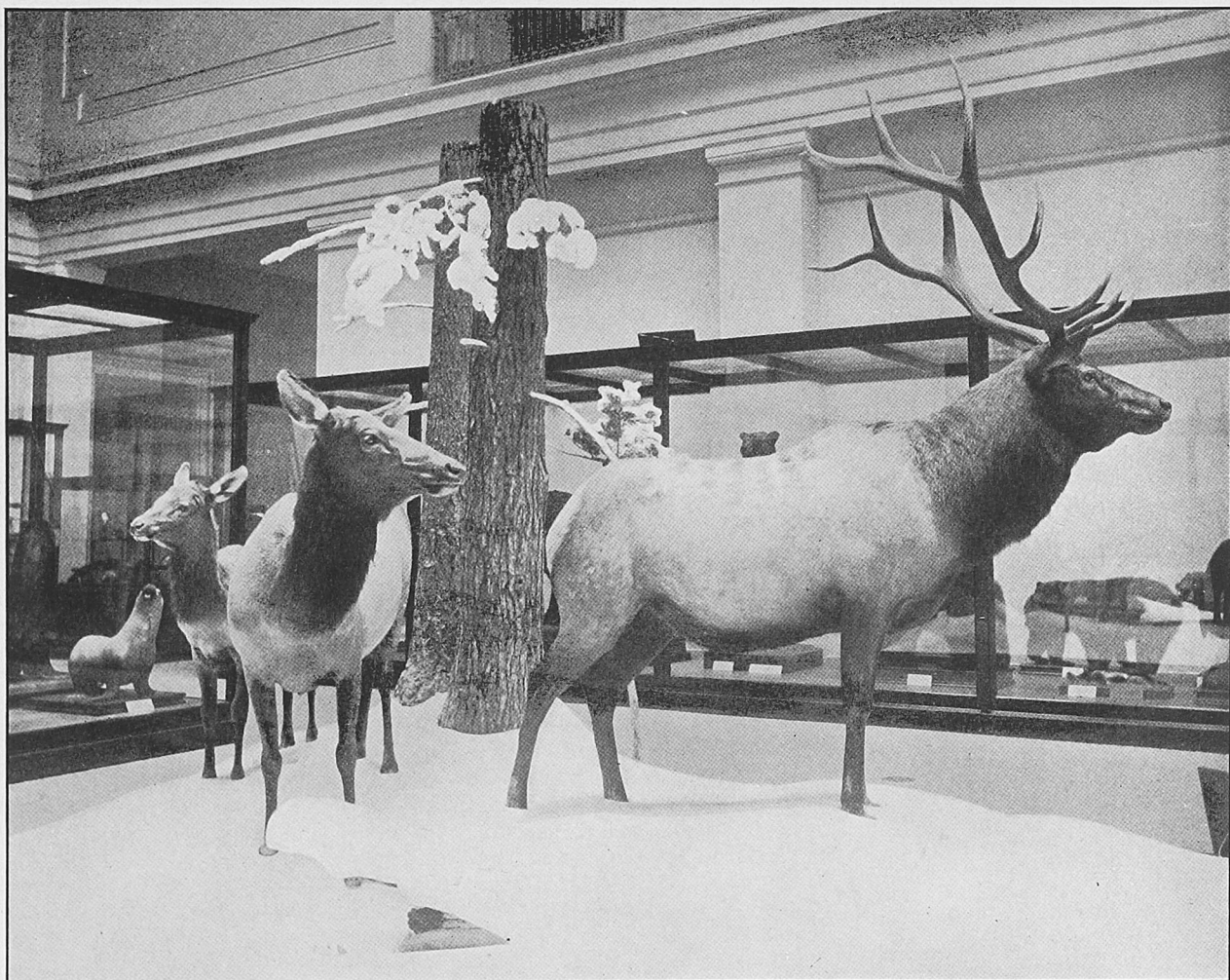


FIG. 1. THE ELK GROUP RECENTLY ADDED TO THE U. S. NATIONAL MUSEUM
MOUNTED BY MR. JAMES L. CLARK; PHOTOGRAPHED BY DR. R. W. SHUFELDT

gorgeous birds with its metallic, green plumage, still occasionally met with in that country.

In Europe history shows us that a peculiar affinity associated more or less closely the naturalist, the medical man and the conservator of the curious in nature. A London apothecary is pictured by Shakespeare, within whose

Needy shop a tortoise hung,
An alligator stuffed, and other skins
Of ill-shaped fishes.

During the past half century I have lived to see, not only the complete differentiation of the labors of the naturalist, the taxidermist, the medical man and the biologist, but also the passing from the old-fashioned methods and materials to the present time, when taxidermy and the best schools of taxidermy all over the world have earned the undoubted right to be classed among the higher arts. The old days of "stuffed" animals and birds have entirely gone by, never to return. Specimens were "stuffed"

sure enough; and after the "job" was finished, the form operated on bore but slight resemblance to its form in life, in nature! Even in our much-revered Smithsonian Institution at Washington, some thirty-five years or so ago, when I had charge of a department there (anatomy) the cases were filled with fish, reptiles, birds and mammals that for the most part were the worst collection of

frights that man ever placed upon exhibition anywhere for the public to study!

Once in a great while some taxidermist, more observing and painstaking than his contemporaries in the trade, turned out a good piece; but such a feat was of the rarest occurrence. As a matter of fact in those days no nation could boast of having more than two or three workers who were especially skilled. We had at least one taxidermist of international reputation—John G. Bell of New York. He was a young man when Audubon was in the prime of life and they were companions on one of the expeditions west of the Mississippi. I met him when I was in the early twenties. He had a good word for some of my own bird skins which I had submitted to him, and his recommendation secured me a position as one of the naturalists to an early polar expedition. Bell had classes in taxidermy in New York; one of his most accomplished pupils, Mr. James Jenkins, then of Stamford, Connecticut, was my instructor in such work.

Taxidermy, or the preservation of animal forms of all kinds for various purposes, forms no exception to the rule of evolution from a stage of crudeness.

About the time that my report for the government appeared there was a movement throughout American taxidermy to bring the profession to the plane where it legitimately belonged, and upon which, owing to its achievements, it was pre-eminently entitled to be placed. It is said that my publications upon the subject, nearly a quarter of a century ago, acted as material stimuli. It was my greatest ambition at that time to induce two or three of the most distinguished taxidermists in Europe to come to this country to make their homes here; but I failed in this endeavor after many trials; it was thought more important at the time to import thousands of good-for-nothings from Europe—in too many instances morally and

physically diseased criminals—than to find room for a single artist in taxidermy! My strongest effort in this direction was made to find a place for H. H. ter Meer, Jr., at that time assistant taxidermist under his father at the Natural History Museum in Leyden, Holland. Mr. ter Meer was anxious to come and to accept a position at a very modest salary; but I utterly failed to place him in any of the principal museums in

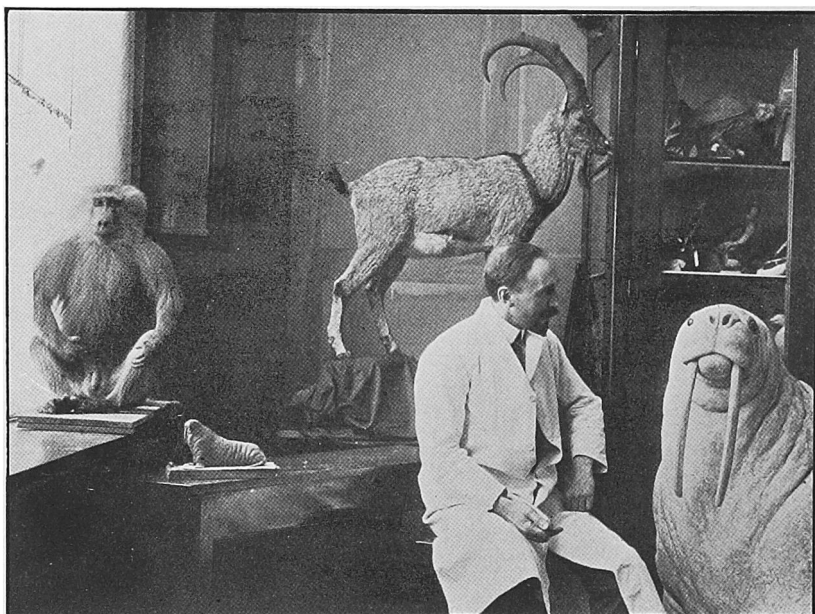


FIG. 2. H. H. TER MEER, JR., IN HIS STUDIO AT THE ROYAL MUSEUM AT LIEPZIG
Note the small "hand model" of the walrus on the table. The use of this is fully described by the author in one of his National Museum reports.

North America—while thousands of ignorant immigrants continued to pour through the portals at Ellis Island every day! Since then Mr. ter Meer has been called to the museum in Leipsic, one of the finest in Europe. A few months ago he sent me photographs of his latest accomplishments in this line, and I have used them as the principal illustrations to the present article. Figure 2 of the illustrations includes his portrait.

Taxidermy, from the very meaning of the word, refers only to the "fixing of the skin" of an animal for permanent preservation, but we have good reason for considering the art to be divided into several departments. Personally, I have never seen the result of an attempt to skin one of our own human species and preserve and mount that skin for exhibition; I was not present when Marsyas suffered through Apollo. But upon the other hand every other mammal known to science has probably been so treated, where specimens could be obtained. This is also true of birds; but below this group,

other methods are usually employed. We rarely skin reptiles, batrachians or fish; these are generally cast and colored to reproduce nature or preserved whole in various preserving fluids. Many kinds of artisans are engaged in the various departments of these methods of animal preservation.

No one will dispute the importance it is to any people to be familiar with all that pertains to the wild and domesticated mammals and birds of the world, and especially with those of one's own country. Several millions of persons, old and young, visit our museums annually; and our Federal and municipal governments expend millions of dollars in placing on exhibition mounted specimens of birds and mammals from all parts of the world, for educational purposes. If these specimens, or any proportion of them, are mounted in such a manner that they do not tally with the descriptions of them given in school books and general literature; if they do not represent the animals as they appear in nature, harm and injustice are done to those who annually visit the museums. Our Federal and State governments would be guilty of spending the people's money, if not to a harmful end, at least not in a beneficial way. This brings us to a point where we may discuss taxidermy as an art.

Has taxidermy won a place for itself among the legitimate arts? Has it risen so far above the plane of mere "animal stuffing" as to be considered a distinct art? In my opinion it most emphatically has. Not only that, but it may now be regarded in the light of an art of the very highest order. Indeed the most advanced taxidermist of the present day, in order to hold his place among the best of his kind, should possess a very full knowledge of much that has to be taught by several of the exact sciences, not to say a certain appreciation of the beautiful; a high regard for an exemplification of truth in his work, with an unusual power of correct observation, and a utilization of the things seen through the trained power of reasoning—several of which prerequisites distinctly pertain to the fine arts.

All this being true, it goes without saying that a taxidermist should, at the start, possess a good general education. He should be more or less familiar with a great deal that biology has to teach him—that is to say, a good knowledge of animal distribution, animal oikology; and it is absolutely essential that he possess a very complete knowledge of topographical anatomy, especially the osteology and superficial myology of mammals, and of such other structures as aid in making the external form of the animals he preserves, as certain glands, veins, arteries, appendages, teeth, etc. He must appreciate the differences in appearance that these many structures present in action and in repose, in life and in death, in health and in disease. He must know, too, the physics of anatomy, in order to be able to correctly represent the possible in animal posture and to discard the impossible, much as the sculptor of animals is called upon to do. He needs to be a close student of the habits of animals, of animal history and the many environments of animals throughout the world of nature in all countries. These studies,

with similar ones in zoölogical gardens which are very important, lead direct to other things with which the modern taxidermist must needs be familiar and able to bring into his work.

One of the most important of these is the use of the photographic camera. With this instrument he is enabled to preserve an enormous series of the habitats of animals in nature; of the *forms* of those he is likely to mount for museums; of their poses under all conditions, and, finally, of their topographical anatomy after they have been skinned or flayed. He should also be more or less of an artist in oil and water-colors; for it is often necessary, after certain mammals and birds have been preserved and mounted, to paint those parts that lose their normal coloring after the operation, such as the naked skin-parts around the eyes, the lips and so on. Every skilled taxidermist keeps a series of scrap-books, in which he preserves oil and water-color sketches of all kinds of animals, with photographs of them and studies of their anatomy; this collection will also contain views of the resorts of animals in nature. With respect to chemistry, the taxidermist has not a little to learn and to apply in his work. He should be familiar with the action of numerous substances as preservatives of animal tissues, and with other matters too numerous to mention.

In the section devoted to mammals and birds in the United States National Museum, Mr. Clark's group of American Wapiti or Elk stands out very prominently. Not long ago I was permitted to make a negative of this, and it is here reproduced as Figure 1 to the present article. To all intents and purposes these animals look as though they were alive. It is interesting to study their different expressions: the confidence of power in the buck, the anxious solicitation of the doe and the lack of all responsibility in the gentle little fawn. Note, too, how perfectly the snow has been imitated and introduced as an "accessory."

Sometimes great skill is demanded in reproducing perishable structures, and no one of these gives the taxidermist more trouble than a big tongue, for instance that structure in the mouth of a tiger or lion as it actually looks during the act of roaring or growling. My old instructor in taxidermy used to make all of the eyes he used in mounting his birds and small mammals; but in these days they can be purchased in the shops. However, if compelled to do so, I still have the knack of making a pair—not only black ones, but a pair for a horned owl, with a black pupil and orange-yellow iris.

Finally, the most difficult task that falls to a taxidermist to perform is the making of the artificial body for the mammal or bird he has preserved and undertaken to "set up" in some appropriate posture or attitude. This false body usually known as a "manikin" [see Fig. 3], requires quite as much skilled knowledge to prepare as is demanded of the most able sculptor to chisel out his horse, his elephant or his wolf, as the case may be. In the first place, it must be constructed of practically imperishable materials, such as a framework of galvanized iron; oakum; wire of various kinds and sizes; plaster of Paris; clay and so on. The manikin when finished must be perfect in all respects,

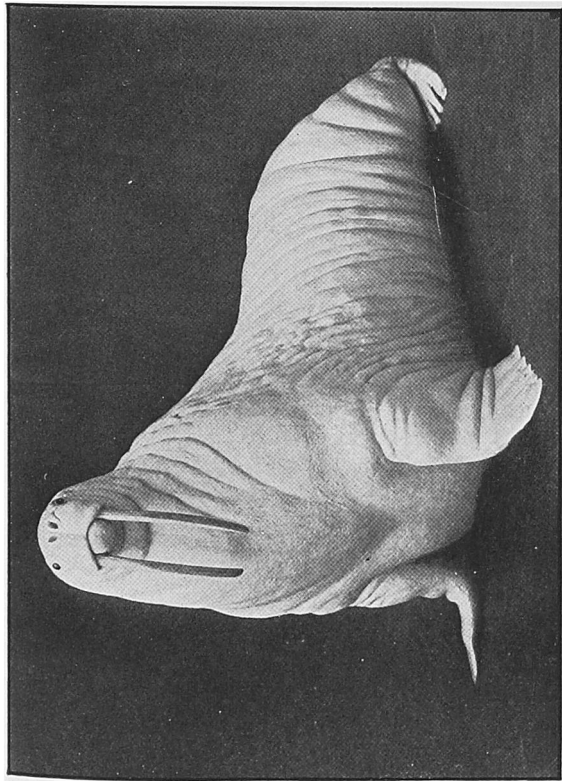


FIG. 3. MANDRIN FOR FEMALE WALRUS, H. H. TER MEER, ADDED TO THE COLLECTION OF THE ZOOLOGICAL MUSEUM OF THE UNIVERSITY OF LEIPZIG.

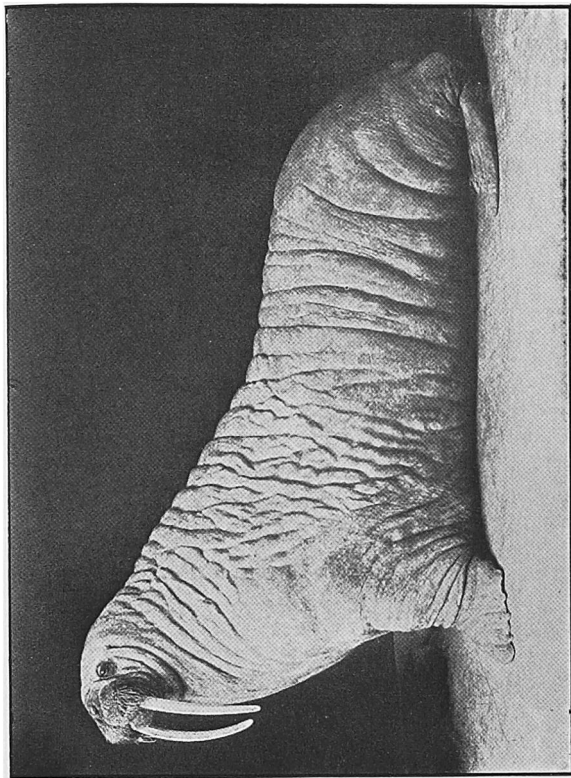


FIG. 4. FEMALE WALRUS (SEE FIG. 3), COMPLETED FOR EXHIBITION BY H. H. TER MEER, JR., ZOOLOGICAL MUSEUM OF THE UNIVERSITY OF LEIPZIG.

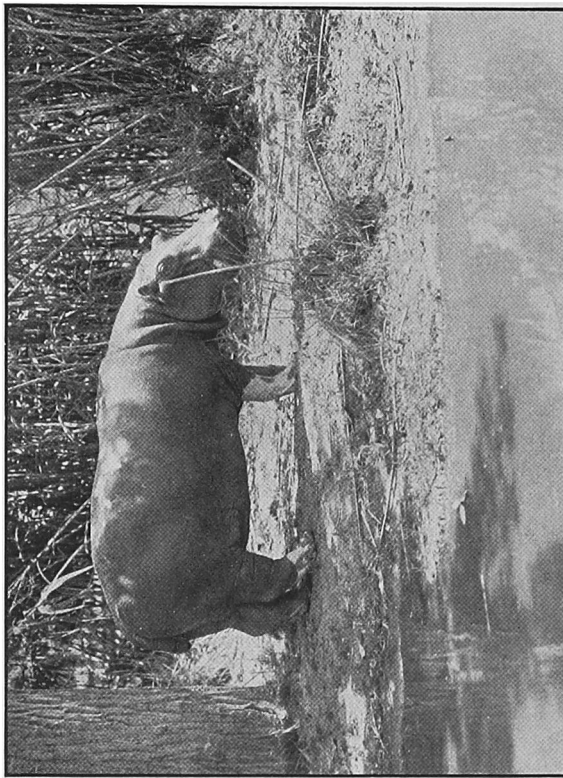


FIG. 7. LIVING HIPPOPOTAMUS MALE. PHOTOGRAPHED ON THE BANKS OF THE NILE, EGYPT. SECURED FROM MONS. JACQUES BOYER, PARIS, FRANCE, BY DR. R. W. SHUFELDT, 1916.

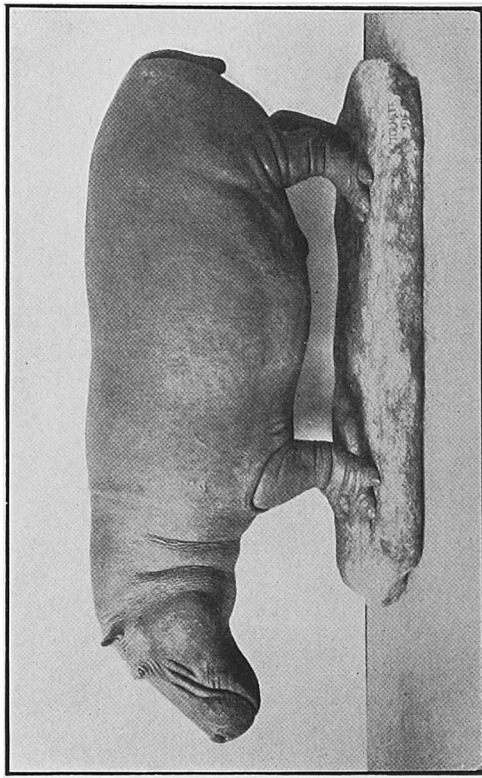


FIG. 6. A FEMALE HIPPOPOTAMUS IN THE ROYAL MUSEUM OF LEIPZIG, PREPARED BY H. H. TER MEER, JR.

must be the very duplicate of the animal in the natural posture which the taxidermist desires to give it when finally consigned to its case or to a place in the exhibition hall. It is an extraordinary operation to see the prepared skin of an eighteen-foot giraffe slipped over its manikin; it fits like a perfectly fitting glove and it would puzzle one to find the original incision after it is sewed up. The big, white "Rhino" in the Roosevelt collection at Washington is a marvel of skill and probably one of the most masterly pieces of taxidermy in the entire world. There are a dozen or more such groups there, and it is worth a trip around the world to see and study them. They can only be compared with the remarkable collection of mounted birds from all parts of the world in the same institution; and when I say this, I refer especially to those preserved

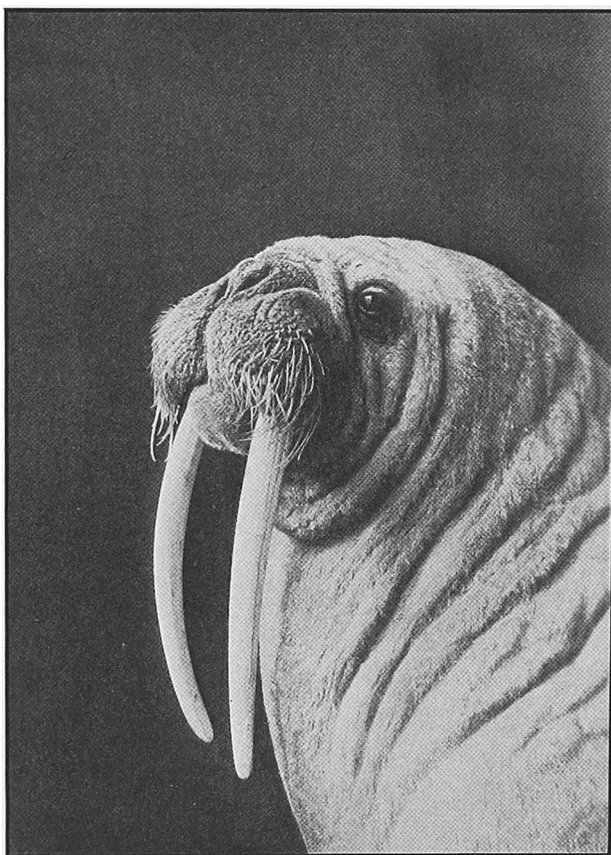


FIG. 5. HEAD OF THE WALRUS SHOWN IN FIG. 4.

recognition, and at this writing taxidermy stands in the same case.

and mounted by the unequalled skill of Mr. Nelson R. Wood.

From what has been set forth, then, in the present paper, it would appear that, in so far as modern taxidermy is concerned, it has, within the last century, passed entirely out of the realm of mere trade, squarely into the sphere of art. It demands, too, in some of its numerous departments, scientific knowledge of a very high order. Well do I remember the entire evolution of photography, as it passed from very simple requirements on the part of its votaries into an art of the highest class and of the most supreme importance in every department of human activity! For a long time many disputed its right to be so classified; but its astounding advances compelled final

Robert W. Shufeldt

ON AN IMAGE OF THE MADONNA

Still eloquent your eyes, though years have flown,
Long centuries of days, of weeks, of years,
Through which they have looked down on anguish, tears,
On sorrow offered to their gaze alone.

Still eloquent—with tenderness benign;
They are as soft, as beautiful, as deep
As are a child's new wakened from its sleep,
Your serious, sweet eyes that fathom mine.

If it be true that miracles there are,
Stretch forth your hands and bless me where I kneel;
For one, slow moment let the shadows steal
From your great wings about me: I am far

From comfort, from the pity of soft hands;
The roughest way is where my feet must tread:
Ah, let me in the heavy days be led
By vision of this quiet spot where stands

Your gracious form, beneficent, humane:
Let me remember that this lonely place
First gave me glimpse of Heaven through your face,
And God's great purpose was at last made plain.
Florence C. White